Algebra II
Unit 6 HW Syllabus Revised*

| Day | Date | Description | Homework |
| :---: | :---: | :---: | :---: |
| 1 |  | $\mathrm{n}^{\text {t1 }}$ roots - simplifying, adding, subtracting | - $\mathrm{n}^{\text {th }}$ Roots WKST 1 |
| 2 |  | $\mathrm{n}^{\text {t1 }}$ roots - multiplying, dividing, rationalizing | - $\mathrm{n}^{\text {th }}$ Roots WKST 2 |
| 3 |  | $\mathrm{n}^{\text {tn }}$ roots - simplifying with variables Quiz Review | - $\mathrm{n}^{\text {th }}$ Roots WKST 3 |
| 4 |  | QUIZ - nth roots <br> Rational Exponents | - Rational Exponents WKST |
| 5 |  | Solving Radical Equations - Equations with one radical | - P. $380(3,4,13,17,18,21,28,62,63,73)$ |
| 6 |  | Solving Radical Equations - Equations with multiple radicals or rational exponents | - P. 380 (5-9) <br> - Set B (see bottom of syllabus) |
| 7 |  | Quiz Review <br> Sketching Square Root and Cube Root Functions | - Quiz Review WKST <br> - P. 372 (2-7, 34, 36, 51-54) <br> - Set A (see bottom of syllabus) |
| 8 |  | QUIZ - Rational Exponents, simplifying nth roots with variables, and solving radical equations <br> Unit 6 Review | - Unit 6 Review |
| 9 |  | Unit 6 Review | - Unit 6 Review |
| 10 |  | UNIT 6 TEST | - SPIRAL ASSIGNMENT 4 |

*This syllabus is subject to change.


## SET A

Sketch the graph, then state the domain and range in interval notation.

1. $y=\sqrt[3]{x-4}-1$
2. $y=-\sqrt[3]{x+1}$
3. $y=2 \sqrt[3]{-x}+5$

## SET B

Solve.

1. $2 x^{2 / 3}=32$
2. $\frac{1}{2} x^{5 / 2}=16$
3. $\frac{1}{7}(x+9)^{3 / 2}=49$
4. $(x-5)^{5 / 3}-73=170$
5. $\left(\frac{1}{3} x-11\right)^{1 / 2}=5$
6. $(3 x+5)^{2 / 3}+22=38$

## SET ANSWERS

## SET A

1. 



D: $(-\infty, \infty)$
R: $(-\infty, \infty)$
2.


D: $(-\infty, \infty)$
R: $(-\infty, \infty)$
3.


D: $(-\infty, \infty)$
R: $(-\infty, \infty)$

## SET B

1. $x= \pm 64$
2. $x=4$
3. $x=40$
4. $x=32$
5. $x=108$
6. $x=-\frac{59}{3}, 23$
